

ABSTRACT OF THE DISCLOSURE

A coolable infrared radiator element of quartz glass with at least one heating tube, which has a gas-tight current lead-through at each of its two ends. A long, stretched-out electrical heating conductor in the heating tube serves as the radiation source. At least one cooling element is provided which has at least one cooling channel for a liquid coolant. A metal reflector is provided which has at least one cooling channel for a liquid coolant. A metal reflector is provided at least in the area of the heating conductor, which reflector has at least one reflective surface. The problem is to provide an infrared radiator which can deliver high energy concentrations of $> 500 \text{ kW/m}^2$ in conjunction with low radiation losses. The problem is solved in that at least one reflective surface, when seen in cross section, describes a line around a surface, where the opening for the passage of at least some of the liquid coolant is provided in the area of this surface.